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10/824,570	04/13/2004	Tsung-Hsing Chen	B-5422 621841-5	6559

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EXAMINER
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GREENE, JOSEPH L

ART UNIT	PAPER NUMBER
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4152

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11/13/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/824,570

Applicant(s)

CHEN, TSUNG-HSING

Examiner

Joseph L. Greene

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1 – 20 are pending in this application.

#### ***Claim Objections***

2. Claim 2 is objected to for a lack of an antecedent basis.
3. Claim 1 recites the limitation "the first package" and "the second package" in lines 9 and 16 (respectively). There is insufficient antecedent basis for this limitation in the claim. For purposes of examination, the limitations will be treated as if they said a first package and a second package.
4. Claim 2, line 4. "the update" was not specifically mentioned in any earlier claim. For examination purposes, it will be treated as if it said an update.
5. Claim 9 recites the limitation "the update data" in line 2. There is insufficient antecedent basis for this limitation in the claim.

#### ***Drawings***

6. The disclosure is objected to because of the following informalities: The listing of 330 in figure 5 is not mentioned in the disclosure. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-2, 5-10, and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al (Patent No US6,009,274) hereinafter Fletcher, in view of Stern et al (Patent No US5,935,249) hereinafter Stern.**

9. With respect to claim 1, Fletcher teaches a system for network device upgrade (abstract), comprising: a computer system for outputting a first packet and a second packet, the first packet comprising at least version identification for upgrade data (Column 5, Lines 20-22, it is to be noted that the data being transferred from the server, over the WAN/LAN, will be via packet transmission), and the second packet comprising at least the upgrade data (Column 5, Lines 27-36, it is to be noted that the data being transferred from the server, over the WAN/LAN, will be via packet transmission); a switching device connected to the computer system (Column 5, Lines 25-26); a plurality of network devices connected to the switching device to receive the first and second packets (Column 5, Lines 29-31, the "agents" represent other networking devices), selectively generating an upgrade request according to the version identification data in the first packet, and outputting an upgrade request to the computer

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system (Column 5, Lines 29-31); wherein the computer system receives the upgrade request, and outputs the second package according to the IP addresses of the plurality of network devices, by which the plurality of network devices is upgraded (Column 5, Lines 29-31).

Fletcher however, doesn't teach receiving the first package to individually generate non-repetitive IP addresses corresponding to the computer system. Accordingly, Stern does teach such a system (Column 8, Lines 10-16 and 21-23). It would have been obvious to a person of ordinary skill, in the art at the time of the invention, to modify the teachings of Fletcher by utilizing IP address matching between a network device and a host computer, as taught by Stern, in order to accurately and efficiently disseminate information through a network.

10. As for claim 2, Fletcher discloses wherein the plurality of network devices receives the second package, compares the upgrade data therein with existing stored data, and generates new firmware according thereto, writing the update to flash memory (Column 5, Lines 34-37). Part of the process of upgrading a system is for the system to determine if it requires the upgrade.

11. As for claim 5, Fletcher discloses wherein the plurality of network devices comprises TCP/IP protocol network devices (Column 2, Lines 17-19).

12. As for claim 6, Fletcher discloses wherein the computer system outputs the first package to the plurality of network devices (Column 5, Lines 20-22).

13. As for claim 7, it is rejected on the same basis as claim 1, in addition, Fletcher teaches wherein version identification data of the upgrade data comprises a file name of the upgrade data (Column 5, Lines 26-31). It is to be noted that the data will be matched according to the version identification that will comprise a file name of the upgrade.

14. With respect to claim 8, Fletcher teaches a method for network device upgrade utilizing a computer system with a plurality of network devices connected thereto (Column 5, Lines 6-9), comprising the steps of: outputting a first package from the computer system to the plurality of network devices, comprising at least version identification corresponding to upgrade data; receiving the first package utilizing the plurality of network devices (Column 5, Lines 20-22, it is implicit that the data being transferred from the server, over the WAN/LAN, will be via packet transmission), selectively generating an upgrade request and outputting the upgrade request to the computer system for utilizing the plurality of network devices according to the version identification data of the upgrade data (Column 5, Lines 29-31); outputting a second package comprising upgrade data to the plurality of network devices according to IP addresses thereof, the plurality of network devices then outputting an upgrade request to the computer system; and upgrading the plurality of network devices completely according to the upgrade data in the second package (Column 5, Lines 29-31).

Fletcher however, doesn't teach wherein the plurality of network devices generate non-repetitive IP addresses corresponding to the computer system. Accordingly, Stern does teach such a system (Column 8, Lines 10-16 and 21-23). It would have been obvious to a person of ordinary skill, in the art at the time of the invention, to modify the teachings of Fletcher by utilizing IP address matching between a network device and a host computer, as taught by Stern, in order to accurately and efficiently disseminate information through a network.

15. As for claim 9, Fletcher teaches wherein the plurality of network devices compares the update data and existing data stored therein to generate upgrade data, generate new firmware according to the upgrade data, and writes the new firmware to flash memory (Column 5, Lines 34-37). Part of the process of upgrading a system is for the system to determine if it requires the upgrade.

16. As for claim 10, it is rejected on the same basis as claim 8. In addition, Stern discloses checking a length of the version identification data of upgrade data (Column 12, Lines 57-60, checking length of data is practiced as part of validation procedures). It would have been obvious to a person of ordinary skill, in the art, at the time of the invention to modify the teachings of Fletcher by including validation procedures when dealing with any sort of data transfer as taught by Stern. Doing so improves the efficiency of such devices by allowing one to know when data has been corrupted.

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17. As for claim 13, Fletcher discloses wherein the plurality of network devices comprises TCP/IP protocol network devices (Column 2, Lines 17-19).

18. As for claim 14, Fletcher discloses wherein the computer system outputs the first package to the plurality of network devices (Column 5, Lines 20-22).

19. As for claim 15, it is rejected on the same basis as claim 8. In addition, Stern teaches checking a signature package of the second package for validity (Column 12, Lines 57-60, checking signatures of data is practiced as part of validation procedures). It would have been obvious to a person of ordinary skill, trained in the art at the time of the invention to modify the teachings of Fletcher by including validation procedures when dealing with any sort of data transfer as taught by Stern. Doing so improves the efficiency of such devices by allowing one to know when data has been corrupted.

20. As for claim 16, Fletcher teaches wherein version identification data of the upgrade data comprises a file name of the upgrade data (Column 5, Lines 26-31). It is to be noted that the data will be matched according to the version identification that will comprise a file name of the upgrade.

21. With respect to claim 17, Fletcher teaches a method for network device upgrade for a network device utilizing an external computer system executing the upgrade (abstract), comprising the steps of: receiving a first package, comprising



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at least version identification corresponding to upgrade data (Column 5, Lines 20-22, it is implicit that the data being transferred from the server, over the WAN/LAN, will be via packet transmission; generating an upgrade request according to the version identification data of the first package, and outputting the upgrade request; receiving a second package comprising at least upgrade data; (Column 5, Lines 27-36, it is implicit that the data being transferred from the server, over the WAN/LAN, will be via packet transmission), generating upgrade data according to comparison of the upgrade data of the second package and existing data from the network device; and writing new firmware to flash memory, the new firmware generated according to existing data (Column 5, Lines 34-37, part of the process of upgrading a system is for the system to determine if it requires the upgrade).

Fletcher however, doesn't teach generating an IP address according to the first package and a media access control address of the network device, the IP address corresponding to a subnet of the computer system. Stern does teach such a system (Column 8, Lines 10-16 and 21-23). It would have been obvious to a person of ordinary skill, in the art, at the time of the invention, to modify the teachings of Fletcher in order to utilize IP address matching between a network device and a host computer in order to accurately and efficiently disseminate information through a network as taught by Stern. Likewise, utilizing a media access control address (or MAC address as more commonly referred to) when dealing with network transmission is a standard practice.

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22. As for claim 18, Fletcher teaches checking the file size of the version identification of the upgrade data (Column 12, Lines 57-60, checking sizes of data is practiced as part of validation procedures).

**23. Claims 4, 12, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher in view of Stern, as applied to claims 1, 8, and 17, and in further view of Vaidhyanathan et al (Patent No US 6,954,459 B1) hereinafter Vaid.**

24. As for claim 4, it is rejected on the same basis as claim 1. However, the combination of Fletcher and Stern does not teach wherein the plurality of network devices receives the first package to generate a subnet mask and a routing table, the subnet mask and the routing table corresponding to the computer system. On the other hand, Vaid teaches such a system (Column 1, Lines 39-45). It would have been obvious to a person having ordinary skill, in the art, at the time of the invention to modify the teachings of Fletcher and Stern to generate subnet masks and routing tables, as taught by Vaid, in order to improve the speed, accuracy, and efficiency of the data transfer system.

25. As for claim 12, it is rejected on the same basis as claim 8. However, the combination of Fletcher and Stern does not teach wherein the plurality of network devices generate a subnet mask and a routing table, the subnet mask and the routing table corresponding to the computer system. On the other hand, Vaid

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teaches such a system (Column 1, Lines 39-45). It would have been obvious to a person having ordinary skill, in the art, at the time of the invention to modify the teachings of Fletcher and Stern to generate subnet masks and routing tables, as taught by Vaid, in order to improve the speed, accuracy, and efficiency of the data transfer system.

26. As for claim 20, it is rejected on the same basis as claim 17. However, the combination of Fletcher and Stern does not teach generating a subnet mask and a routing table, both corresponding to the computer system. On the other hand, Vaid teaches such a system (Column 1, Lines 39-45). It would have been obvious to a person having ordinary skill, in the art, at the time of the invention to modify the teachings of Fletcher and Stern to generate subnet masks and routing tables, as taught by Vaid, in order to improve the speed, accuracy, and efficiency of the data transfer system.

**27. Claims 3, 11, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher in view of Stern, as applied to claims 1, 8, and 17, and in further view of Stevens (TCP/IP Illustrated Volume 1: The protocols. Copyright 1994) hereinafter Stevens.**

28. As for claim 3, it is rejected on the same basis as claim 1. However, the combination of Fletcher and Stern does not teach wherein an IP address comprises an immobile part and an alteration part, the immobile part decided by

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a media access control address of a network device, the immobile part corresponding to a subnet of the computer system. On the other hand, Stevens does teach such a system (Chapter 3.5, Page #44). It would have been obvious to a person having ordinary skill, in the art, at the time of the invention to modify the teachings of Fletcher and Stern in order to utilize IP addresses with subnet masks as taught by Stern. Doing so is the basic requirement of the TCP/IP protocol, which is the most common protocol on which data is transferred.

29. As for claim 11, it is rejected on the same basis as claim 8. However, the combination of Fletcher and Stern does not teach wherein an IP address comprises an immobile part and an alteration part, the immobile part decided by a media access control address of a network device, the immobile part corresponding to a subnet of the computer system. On the other hand, Stevens does teach such a system (Chapter 3.5, Page #44). It would have been obvious to a person having ordinary skill, in the art, at the time of the invention to modify the teachings of Fletcher and Stern in order to utilize IP addresses with subnet masks as taught by Stern. Doing so is the basic requirement of the TCP/IP protocol, which is the most common protocol on which data is transferred.

30. As for claim 19, it is rejected on the same basis as claim 17. However, the combination of Fletcher and Stern does not teach wherein an IP address comprises an immobile part and an alteration part, the immobile part decided by a media access control address of a network device, the immobile part

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corresponding to a subnet of the computer system. On the other hand, Stevens does teach such a system (Chapter 3.5, Page #44). It would have been obvious to a person having ordinary skill, in the art, at the time of the invention to modify the teachings of Fletcher and Stern in order to utilize IP addresses with subnet masks as taught by Stern. Doing so is the basic requirement of the TCP/IP protocol, which is the most common protocol on which data is transferred.

### ***Conclusion***

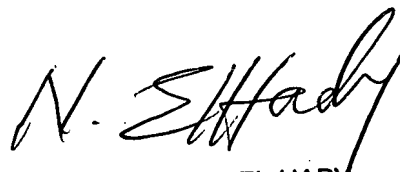
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Greene whose telephone number is (571) 270-3730. The examiner can normally be reached on Monday - Thursday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nabil El-Hady can be reached on (571) 272-3963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLG



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